

## REMARKS

The Office Action has been carefully considered. Applicant respectfully requests a reconsideration of the finally rejected claims and allowance of this application.

Claims 9-15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 6,294,831 to Shishido *et al.* ("Shishido") in view of United States Patent No. 6,288,900 to Johnson *et al.* ("Johnson"). The Examiner stated that:

Shishido et al does not disclose a metal heat sink plate having thermal coefficient of expansion being substantially different from that of said primary substrate. However, Johnson et al discloses on figure 6 a metal heat sink plate 28 having thermal coefficient of expansion being substantially different form that of said primary substrate 29. (Office Action at page 2.)

This rejection is respectfully traversed because these references cannot be combined. Shishido not only lacks any disclosure about a metal heat sink plate having a thermal coefficient of expansion that is substantially different from that of the primary substrate, Shishido actually teaches away from such structure. In several places in its disclosure, Shishido teaches that a metal cap structure covering the outer surface of the semiconductor chip has substantially the same coefficient of thermal expansion as the primary substrate. (See Shishido at Col. 1, lines 62-64; Col. 2, lines 3-4 and lines 15-18; Col. 3, lines 32-34 and lines 46-47; Col. 4, lines 9-12; lines 32-34; Col. 5, lines 3-6, and lines 14-18.) Thus, Shishido and Johnson teach incompatible structures and they cannot be combined. Accordingly, independent claim 9 and claims 10-15 depending therefrom are allowable over Shishido and Johnson, whether taken singly or in combination. Withdrawal of the rejection of these claims and their allowance are respectfully requested.

Claim 20 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Shishido and Johnson, further in view of United States Patent No. 5,491,362 to Hamzehdoost *et al.* ("Hamzehdoost"). This rejection is respectfully traversed.

Claim 20 depends from claim 9. Claim 9 is allowable over Shishido and Johnson, as discussed above, and Hamzehdoost does not remedy the deficiencies of Shishido and Johnson. Accordingly, claim 20, which depends from claim 9, is allowable over Shishido, Johnson and Hamzehdoost, whether taken singly or in combination. Withdrawal of this rejection and allowance of claim 20 are respectfully requested.

For the above reasons, withdrawal of the rejection of claims 9-15, and 20 over the prior art and allowance of the pending claims are respectfully requested. Should the Examiner not agree that all claims are allowable, a personal or telephonic interview is respectfully requested to discuss any remaining issues.

Please charge any fees due for the submission of this response to Pennie & Edmonds LLP deposit account No. 16-1150.

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Respectfully submitted,

*by [Signature]*  
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